

Listing of Claims

The following listing of claims replaces all prior versions and listings of claims in the application.

1. (Currently amended): A device for bagging dry ingredients, comprising:
a weighing mechanism operable to dispense and weight stored dry ingredients; and,
a packaging mechanism operable to allow the dry ingredients in predetermined amounts sequentially dispensed by the weighing mechanism to be encapsulated in sequence into small bags, the small bags being formed continuously from a belt-like packaging material having a certain width,

wherein the packaging mechanism is ~~located below the weighing mechanism, the packaging mechanism being integrated~~ disposed integrally with the weighing mechanism on a common frame,

wherein the weighing mechanism comprises:

(1) a hopper operable to store the dry ingredients and to discharge the dry ingredients in steps out of the hopper through a bottom of the hopper;

(2) a plurality of juxtaposed dispensing pipes positioned horizontally or slanted downward in a direction in which the dry ingredients discharged from the hopper are dispensed, the dispensing pipes being driven into independent rotation, thereby dispensing the dry ingredients in steps from the hopper;

(3) weighing buckets positioned downward from the dispensing pipes, the weighing buckets being operable to weight the dry ingredients to store the dry ingredients in predetermined amounts, each of the weighing buckets being provided with an open/close damper at a lower

portion of each of the weighing buckets in order to dispense the dry ingredients temporarily stored in the weighing buckets; and

(4) a dispensing chute operable to temporarily store the dry ingredients discharged from the weighing buckets and to supply the packaging mechanism with the dry ingredients discharged from the weighing buckets, and through an open/close damper at elevated speed,

wherein the packaging mechanism comprises a packaging material-folding unit operable to progressively release the packaging material wound in a roll-shape, and to fold the packaging material into two along a centerline of the packaging material; and a small bag-forming unit operable to fabricate top-open, small bags by permitting the packaging material folded and supplied by the packaging material-folding unit to be longitudinally sealed along an open sideward edge of each of the small bags to be formed, and to be transversely sealed along a lower portion of each of the small bags to be formed, while simultaneously such transverse sealing allows each of the small bags already charged with the dry ingredients to be encapsulated along a top thereof, and

wherein the dry ingredients in predetermined amounts stored in the weighing buckets are discharged from the weighing buckets into the dispensing chute through the open/close dampers of the weighing buckets, and further, the dry ingredients in the dispensing chute are fed in sequence into ~~the packaging mechanism at elevated speed through~~ the top-open small bags formed in the small bag-forming unit through the open/close damper of the dispensing chute, the packaging mechanism the small bag-forming unit being located beneath the dispensing chute.

2. (Currently amended): A device for bagging dry ingredients as defined in claim 1, wherein the packaging mechanism further comprises:

~~a packaging material folding unit operable to progressively release the packaging material wound in a roll shape, and to fold the packaging material into two equal parts along a centerline of the packaging material, the centerline being a center of a transverse direction of the packaging~~

material;

~~a small bag forming unit operable to fabricate top open, small bags by permitting the packaging material folded and supplied by the packaging material folding unit to be longitudinally sealed along an open sideward edge of each of the small bags to be formed, and to be transversely sealed along a lower portion of each of the small bags to be formed, while simultaneously such transverse sealing allows each of the small bags already charged with the dry ingredients to be encapsulated along a top thereof;~~

a small bag-conveying unit located downward from the small bag-forming unit for intermittently conveying the small bags downward; and

a small bag-separating unit disposed downward from the small bag-conveying unit for allowing the small bags packed with the dry ingredients to be transversely cut off from each other in sequence along each position at which each of the small bags has transversely been sealed.

3. (Currently amended): A device for bagging dry ingredients as defined in claim ~~[[2]]~~ 1, wherein the dispensing chute has a discharge port located over the small bag forming unit, and the dry ingredients weighed by the weighing buckets are put into the top open, small bags through the discharge port immediately after formation of the top open, small bags hopper comprises an upper hopper and a lower hopper located below the upper hopper, and a rotating dispenser is provided on the upper hopper at a lower discharge portion of the upper hopper in order to feed the dry ingredients in steps from the upper hopper into the lower hopper through the dispenser.

4. (Currently amended): A device for bagging dry ingredients as defined in ~~any one of claims 1-3~~ claim 2, wherein the hopper comprises an upper hopper and a lower hopper located below the upper hopper, and a rotating dispenser is provided on the upper hopper at a lower

discharge portion of the upper hopper in order to feed the dry ingredients in steps from the upper hopper into the lower hopper through the dispenser.

5. (Currently amended): A device for bagging dry ingredients as defined in ~~any one of claims 1-4~~ claim 1, wherein the plurality of dispensing pipes are disposed on a common support member, and gradient angles of the plurality of dispensing pipes are simultaneously adjustable.

6. (New): A device for bagging dry ingredients as defined in claim 2, wherein the plurality of dispensing pipes are disposed on a common support member, and gradient angles of the plurality of dispensing pipes are simultaneously adjustable.

7. (New): A device for bagging dry ingredients as defined in claim 3, wherein the plurality of dispensing pipes are disposed on a common support member, and gradient angles of the plurality of dispensing pipes are simultaneously adjustable.

8. (New): A device for bagging dry ingredients as defined in claim 4, wherein the plurality of dispensing pipes are disposed on a common support member, and gradient angles of the plurality of dispensing pipes are simultaneously adjustable.